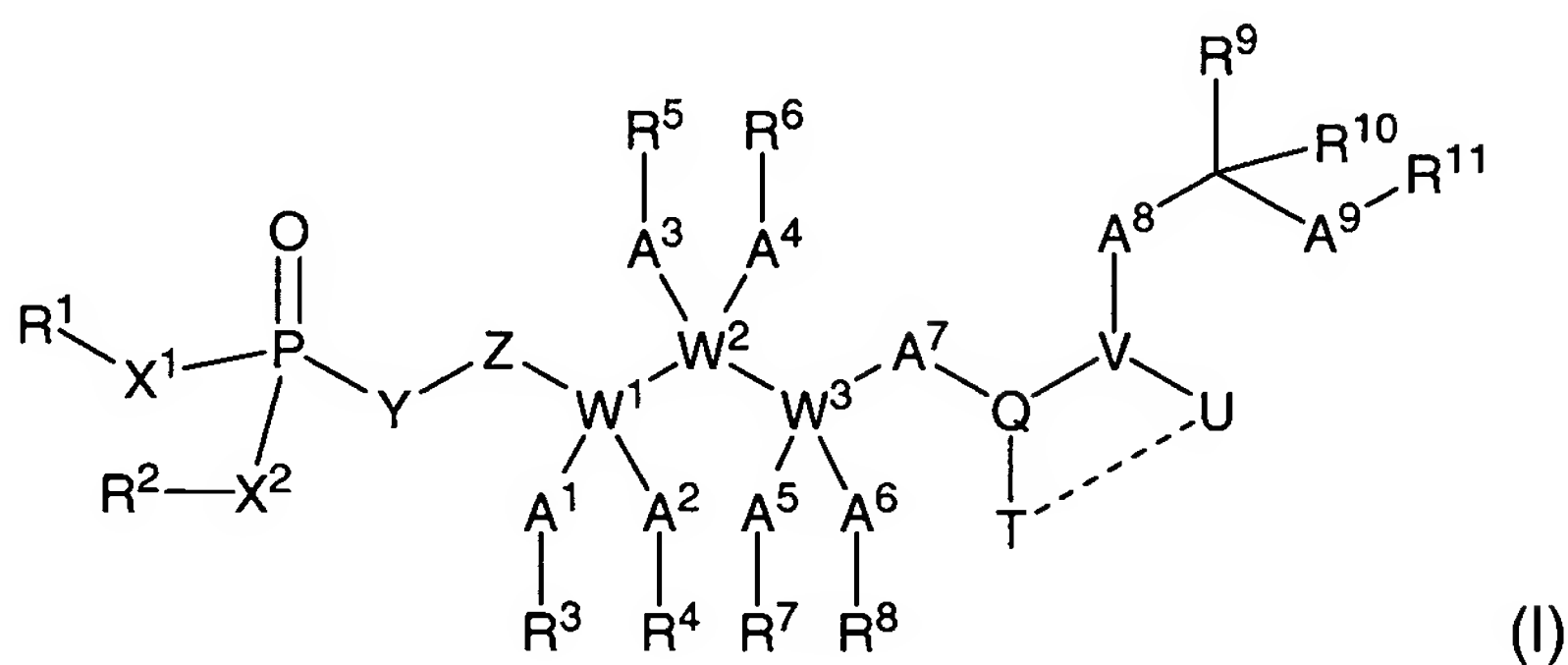


Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A compound having formula (I)



wherein the dashed line indicates a single or double bond, or is absent;

wherein R^1 and R^2 are each and independently selected from the group comprising - H and phospho protecting groups;

wherein X^1 and X^2 are each and independently selected from the group comprising - O-, -S-, -NR¹²-;

wherein Z is selected from the group comprising -O-, -S-, -NR¹³-, -(CR¹⁴R¹⁵)-

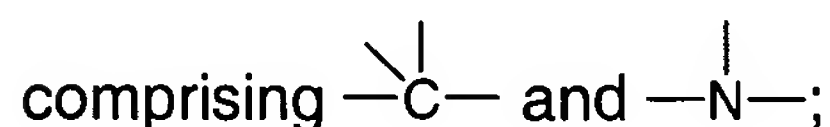
wherein A^1 , A^2 , A^3 , A^4 , A^5 , A^6 , A^7 , A^8 and A^9 are each and independently selected from the group comprising -O-, -S-, -NR¹⁶-, -S(O)-, -S(O₂)-, -C(O)-, -C(S)-, -NR¹⁷-C(O)-, -NR¹⁸-C(S)-, -NR¹⁹-C(O)-NR²⁰-, -NR²¹C(S)-NR²²-, -NR²³-S(O)-, -NR²⁴-S(O₂)-, and -NR²⁵-C(O)-O-, or are each and independently from each other absent;

wherein Y is selected from the group comprising -O-, -CR²⁶R²⁷-;

wherein Q and V are each and independently selected from the group comprising



wherein W^1 , W^2 and W^3 are each and independently selected from the group



wherein R^3 , R^4 , R^5 , R^6 , R^7 , R^8 , R^9 , R^{10} , R^{11} , R^{12} , R^{13} , R^{14} , R^{15} , R^{16} , R^{17} , R^{18} , R^{19} , R^{20} , R^{21} , R^{22} , R^{23} , R^{24} , R^{25} , R^{26} , R^{27} , R^{28} , T and U are each and independently selected from the group comprising -H, halo, alkyl, substituted alkyl, straight alkyl, substituted straight alkyl, branched alkyl, substituted branched alkyl, alkenyl, straight alkenyl, substituted straight alkenyl, branched alkenyl, substituted branched alkenyl, alkynyl, straight alkynyl, substituted straight alkynyl, branched alkynyl, substituted branched alkynyl, cycloalkyl, substituted cycloalkyl, cycloalkenyl, substituted cycloalkenyl, heterocyclyl, substituted heterocyclyl, mono-unsaturated heterocyclyl, substituted mono-unsaturated heterocyclyl, poly-unsaturated heterocyclyl, substituted poly-unsaturated heterocyclyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl,

arylalkyl, substituted arylalkyl, heteroarylalkyl, substituted heteroarylalkyl, heterocyclalkyl, substituted and heterocyclalkyl, or are each and independently from each other absent;

and the salts, hydrates, solvates and prodrugs thereof.

2. (Original) The compound according to claim 1, wherein W^1 , A^1 , A^2 , A^3 , A^4 , A^5 , R^3 , and R^4 are absent; wherein R^5 , R^6 and R^7 are -H; wherein W^2 and W^3 is $\text{—}\overset{\text{I}}{\underset{\text{I}}{\text{C}}}\text{—}$; wherein preferably Z is either -S- or -O-, more preferably -S-; and wherein preferably Y is -CH₂-; wherein preferably A^7 is either -C(O)- or -CH₂-; wherein both X^1 and X^2 are -O-; wherein A^8 is -C(O)-O- or -NR²⁹-C(O)-, whereby the C-atom of the -NR²⁹-C(O)- and -C(O)-O- is covalently bound to V; and wherein R^{29} is -H or lower alkyl.

3. (Original) The compound according to claim 1, wherein W^1 , W^2 , A^1 , A^2 , A^3 , A^4 , A^5 , R^3 , R^4 , R^5 , and R^6 are absent; wherein R^7 is -H; wherein W^3 is $\text{—}\overset{\text{I}}{\underset{\text{I}}{\text{C}}}\text{—}$; wherein preferably Z is either -S- or -O-, more preferably -S-; and wherein preferably Y is -CH₂-; wherein preferably A^7 is either -C(O)- or -CH₂-; wherein both X^1 and X^2 are -O-; wherein A^8 is -C(O)-O- or -NR²⁹-C(O)-, whereby the C-atom of the -NR²⁹-C(O)- and -C(O)-O- is covalently bound to V; and wherein R^{29} is -H or lower alkyl.

4. (Currently Amended) The compound according to ~~any of the claims 1 to 3,~~
~~preferably claims 2 to 3, more preferably~~ claim 3, wherein R^8 is $-H$ and wherein
 preferably A^6 is absent.

5. (Currently Amended) The compound according to ~~any of the claims 1 to 3,~~
~~preferably claims 2 to 3~~ claim 3, wherein A^6 is selected from the group comprising -
 $NR^{17}-C(O)-$, $-NR^{24}-S(O_2)-$, $-NR^{25}-C(O)-O-$, and wherein R^8 is selected from the group
 comprising optionally substituted aryl-(lower alkyl), optionally substituted heteroaryl-
 (lower alkyl), optionally substituted aryl and optionally substituted heteroaryl,
 preferably optionally substituted phenyl, optionally substituted phenyl-(lower alkyl)
 and more preferably 1-acetylamino-2-benzo[b]thiophen-3-yl-ethyl; dihalo-
 benzylsulfanylethyl, monohalo-benzylsulfanylethyl, -4-(monohalo-phenyl)-4-oxo-
 butyl, 4-(dihalo-phenyl)-4-oxo-butyl; benzo[1,3]dioxol-5-ylmethyl, wherein R^{17} , R^{24}
 and R^{25} are each and independently selected from the group comprising $-H$ and
 lower alkyl.

6. (Currently Amended) The compound according to ~~any of claims 1 to 5,~~
~~preferably claims 2 to 5, more preferably claims 4 to 5~~ claim 4, wherein Q and V are
 $\begin{array}{c} | \\ -N- \end{array}$, wherein T and U are alkyl, preferably lower alkyl, and wherein the dashed line
 is absent or a single bond.

7. (Currently Amended) The compound according to ~~any of claims 1 to 5,~~
~~preferably claims 2 to 5, more preferably claims 4 to 5~~ claim 4, wherein R^{28} is $-H$ or

lower alkyl, wherein the dashed line is a single bond, wherein T is -CH₂- and wherein U is selected from the group comprising -(CH₂)_n-; wherein n is any integer from 1 to 5 and preferably 2,3 or 4.

8. (Currently Amended) The compound according to ~~any of the claims 1 to 7,~~
~~preferably claims 2 to 7, more preferably claims 4 to 7~~ claim 4, wherein R⁹ is -H and
wherein R¹⁰ is selected from the group comprising substituted lower alkyl, preferably
aryl-(lower-alkyl), heteroaryl-(lower-alkyl), cycloalkyl-(lower-alkyl), heterocyclyl-
(lower-alkyl), and more preferably optionally substituted 2-naphthalen-2-yl-ethyl,
optionally substituted naphthalen-2-ylmethyl, optionally substituted 2-phenyl-ethyl,
optionally substituted 2-phenyl-methyl, optionally substituted quinolin-7-ylmethyl-,
and optionally substituted 3-isoquinolin-7-ylmethyl.

9. (Currently Amended) The compound according to ~~any of claims 1 to 8, preferably~~
~~claims 2 to 8, more preferably claim 4 to 8~~ claim 4 wherein A⁹ is -NH-C(O)- or NH-
C(S)-, whereby the N-atom of each of -NH-C(O)- and NH-C(S)- is covalently bound
to R¹¹, and wherein R¹¹ is selected from the group comprising -H, optionally
substituted alkyl, optionally substituted aryl, optionally substituted heteroaryl,
optionally substituted heterocyclyl, preferably optionally substituted lower alkyl or -H,
and more preferably optionally substituted *tert*-butyl or optionally substituted
isopropyl.

10. (Currently Amended) The compound according to ~~any of claims 1 to 8,~~
~~preferably claims 2 to 8, more preferably claims 4 to 8~~ claim 4, wherein A⁹ is absent
and wherein R¹¹ is selected from the group comprising optionally substituted alkyl,
optionally substituted aryl, optionally substituted heteroaryl, optionally substituted
heterocyclyl, preferably optionally substituted phenyl, optionally substituted thiazol-2-
yl, optionally substituted pyridyl and optionally substituted [1,3,4]oxadiazol-2-yl,
optionally substituted 4H-[1,2,4]triazol-3-yl.

11. (Currently Amended) The compound according to ~~any of the preceding claims,~~
~~preferably claims 2 to 10, more preferably claims 4 to 10~~ claim 4 wherein both R¹ and
R² are -H.

12. (Currently Amended) The compound according to ~~any of the preceding claims,~~
~~preferably claims 2 to 10, more preferably claims 4 to 10~~ claim 4, wherein R¹ and R²
are each a phospho protecting group, whereby preferably R¹ and R² are each and
independently selected from the group comprising 2,2-dimethyl-propionyloxymethyl,
isopropoxycarbonyloxymethyl, and 2-acetylsulfanyl-ethyl.

13. (Currently Amended) A compound, preferably a compound according to ~~any of~~
~~the preceding claims~~ claim 1, selected from the group comprising
{2-(2-Acetylamino-3-benzo[b]thiophen-3-yl-propionylamino)-3-[2-(1-carbamoyl-2-
naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-propoxymethyl}-phosphonic
acid

{2-(2-Acetylamino-3-benzo[b]thiophen-3-yl-propionylamino)-3-[2-(1-carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-propylsulfanylmethyl}-phosphonic acid

{2-(2-Acetylamino-3-benzo[b]thiophen-3-yl-propionylamino)-3-[2-(1-carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-propylsulfanylmethyl}-phosphonic acid

[3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-(9H-fluoren-9-ylmethoxycarbonylamino)-3-oxo-propoxymethyl]-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-[3-(4-chloro-benzylsulfanyl)-propionylamino]-3-oxo-propylsulfanylmethyl}-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-[3-(3,4-dichloro-benzylsulfanyl)-propionylamino]-3-oxo-propylsulfanylmethyl}-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-[5-(4-chloro-phenyl)-5-oxo-pentanoylamino]-3-oxo-propylsulfanylmethyl}-phosphonic acid

[3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-2-(5-phenyl-pentanoylamino)-propylsulfanylmethyl]-phosphonic acid

{2-(3-Benzo[b]thiophen-3-yl-2-{6-[5-(-2-(6-hydroxy-3-oxo-3H-xanthen-9-yl)-benzoic acid)-ureido]-hexanoylamino}-propionylamino)-3-[2-(1-carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-propylsulfanylmethyl}-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-[2-(2,5-dioxo-imidazolidin-4-yl)-acetylamino]-3-oxo-propylsulfanylmethyl}-phosphonic acid

[3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-(2-cyclohexyl-acetyl-amino)-3-oxo-propylsulfanylmethyl]-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-2-[(2-oxo-thiazolidine-4-carbonyl)-amino]-propylsulfanylmethyl}-phosphonic acid

(3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-2-[[2-oxo-3-(2-oxo-thiazolidine-4-carbonyl)-thiazolidine-4-carbonyl]-amino]-propylsulfanylmethyl)-phosphonic acid

[3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-2-(3-phenoxy-benzoylamino)-propylsulfanylmethyl]-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-2-[(1.2.3.4-tetrahydro-naphthalene-2-carbonyl)-amino]-propylsulfanylmethyl}-phosphonic acid

[3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-2-(3-thiophen-2-yl-propionylamino)-propylsulfanylmethyl]-phosphonic acid

[3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-(9H-fluoren-9-ylmethoxycarbonylamino)-3-oxo-propylsulfanylmethyl]-phosphonic acid

{2-[3-Benzo[b]thiophen-3-yl-2-[(piperidine-4-carbonyl)-amino]-propionylamino]-3-[2-(1-carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-propylsulfanylmethyl}-phosphonic acid

{2-[3-Benzo[b]thiophen-3-yl-2-(2-piperazin-1-yl-acetyl-amino)-propionylamino]-3-[2-(1-carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-propylsulfanylmethyl}-phosphonic acid

{2-Benzoylamino-3-[2-(1-carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-propylsulfanylmethyl}-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-2-phenylacetyl-amino-propylsulfanylmethyl}-phosphonic acid

[3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-2-(3-phenyl-propionyl-amino)-propylsulfanylmethyl]-phosphonic acid

[3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-2-(4-phenyl-butyrylamino)-propylsulfanylmethyl]-phosphonic acid

{2-(2-Biphenyl-4-yl-acetyl-amino)-3-[2-(1-carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-propylsulfanylmethyl}-phosphonic acid

{2-(2-Acetyl-amino-3-benzo[b]thiophen-3-yl-propionyl-amino)-3-[2-(1-carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-propylsulfanylmethyl}-phosphonic acid

Ac-Bta-Cys(CH₂-P(O)(OH)₂)-NMeazaAla-2Nal-NH₂

Ac-Bta-Cys(CH₂-P(O)(OH)₂)-NMeazaGly-2Nal-NH₂

{2-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-oxo-ethylsulfanylmethyl}-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-propylsulfanylmethyl}-phosphonic acid

{2-Acetyl-amino-3-[2-(1-carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-propylsulfanylmethyl}-phosphonic acid

{2-Benzyloxycarbonyl-amino-3-[2-(1-carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-propylsulfanylmethyl}-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-2-phenylmethanesulfonylamino-propylsulfanylmethyl}-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-2-[(1-phenyl-cyclopentanecarbonyl)-amino]-propylsulfanylmethyl}-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-[2-(2-chlorophenyl)-acetylamino]-3-oxo-propylsulfanylmethyl}-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-[2-(4-chlorophenyl)-acetylamino]-3-oxo-propylsulfanylmethyl}-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-[2-(4-methoxy-phenyl)-acetylamino]-3-oxo-propylsulfanylmethyl}-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-[4-(4-chlorophenyl)-4-oxo-butyrylamino]-3-oxo-propylsulfanylmethyl}-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-[4-(4-methoxy-phenyl)-butyrylamino]-3-oxo-propylsulfanylmethyl}-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-2-[(5-oxo-pyrrolidine-2-carbonyl)-amino]-propylsulfanylmethyl}-phosphonic acid

{2-[(Benzofuran-2-carbonyl)-amino]-3-[2-(1-carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-propylsulfanylmethyl}-phosphonic acid

[3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-2-(2-piperazin-1-yl-acetylamino)-propylsulfanylmethyl]-phosphonic acid

{2-[(3-Acetyl-2-oxo-thiazolidine-4-carbonyl)-amino]-3-[2-(1-carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-propylsulfanylmethyl}-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-

isobutoxycarbonylamino-3-oxo-propylsulfanylmethyl}-phosphonic acid

{2-Butoxycarbonylamino-3-[2-(1-carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-

piperidin-1-yl]-3-oxo-propylsulfanylmethyl}-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-

methoxycarbonylamino-3-oxo-propylsulfanylmethyl}-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-2-

phenoxycarbonylamino-propylsulfanylmethyl}-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-2-

phenethyloxycarbonylamino-propylsulfanylmethyl}-phosphonic acid

{2-Benzenesulfonylamino-3-[2-(1-carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-

piperidin-1-yl]-3-oxo-propylsulfanylmethyl}-phosphonic acid

[3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-2-(2-

phenyl-ethanesulfonylamino)-propylsulfanylmethyl]-phosphonic acid

[3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-2-(3-

phenyl-propane-1-sulfonylamino)-propylsulfanylmethyl]-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-

methanesulfonylamino-3-oxo-propylsulfanylmethyl}-phosphonic acid

[3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-2-(2.4.6-

trimethyl-benzenesulfonylamino)-propylsulfanylmethyl]-phosphonic acid

[3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-2-

(thiophene-2-sulfonylamino)-propylsulfanylmethyl]-phosphonic acid

[3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-2-(3-piperidin-1-yl-propionylamino)-propylsulfanylmethyl]-phosphonic acid

{2-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-ethylsulfanylmethyl}-phosphonic acid

{2-(2-Benzo[1.3]dioxol-5-yl-acetylamino)-3-[2-(1-carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-propylsulfanylmethyl}-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-[2-(3,5-dimethoxy-phenyl)-acetylamino]-3-oxo-propylsulfanylmethyl}-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-[2-(2-methoxy-phenyl)-acetylamino]-3-oxo-propylsulfanylmethyl}-phosphonic acid

{2-[2-(2-Naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-oxo-ethylsulfanylmethyl}-phosphonic acid

[2-Oxo-2-(2-phenylcarbamoyl-piperidin-1-yl)-ethylsulfanylmethyl]-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-[2-(3-methoxy-phenyl)-acetylamino]-3-oxo-propylsulfanylmethyl}-phosphonic acid

{3-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-3-oxo-2-[2-(4-piperazin-1-yl-phenyl)-acetylamino]-propylsulfanylmethyl}-phosphonic acid

{2-[2-(1-tert-Butylcarbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-oxo-ethylsulfanylmethyl}-phosphonic acid

{2-[2-(1-Methylcarbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-oxo-ethylsulfanylmethyl}-phosphonic acid

{2-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-1-methyl-2-oxo-ethylsulfanylmethyl}-phosphonic acid

[2-(2-Benzylcarbamoyl-piperidin-1-yl)-2-oxo-ethylsulfanylmethyl]-phosphonic acid

[2-Oxo-2-(2-phenethylcarbamoyl-piperidin-1-yl)-ethylsulfanylmethyl]-phosphonic acid

{2-Oxo-2-[2-(3-phenyl-propylcarbamoyl)-piperidin-1-yl]-ethylsulfanylmethyl}-
phosphonic acid

{2-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-1-
methylcarbamoylmethyl-2-oxo-ethylsulfanylmethyl}-phosphonic acid

{2-[2-(1-Carbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-1-[(4-methoxy-
phenylcarbamoyl)-methyl]-2-oxo-ethylsulfanylmethyl}-phosphonic acid

{2-[2-(1-tert-Butylcarbamoyl-2-naphthalen-2-yl-ethylcarbamoyl)-piperidin-1-yl]-
ethylsulfanylmethyl}-phosphonic acid

2,2-Dimethyl-propionic acid {2-[2-(1-tert-butylcarbamoyl-2-naphthalen-2-yl-
ethylcarbamoyl)-piperidin-1-yl]-2-oxo-ethylsulfanylmethyl}-(2,2-dimethyl-
propionyloxymethoxy)-phosphinoyloxymethyl ester

{2-[2-(2-Naphthalen-2-yl-1-phenyl-ethylcarbamoyl)-piperidin-1-yl]-2-oxo-
ethylsulfanylmethyl}-phosphonic acid

(2-{2-[1-(4-Methyl-thiazol-2-yl)-2-naphthalen-2-yl-ethylcarbamoyl]-piperidin-1-yl}-2-
oxo-ethylsulfanylmethyl)-phosphonic acid

{2-[2-(2-Naphthalen-2-yl-1-[1,3,4]oxadiazol-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-
oxo-ethylsulfanylmethyl}-phosphonic acid

(2-{2-[2-Naphthalen-2-yl-1-(4H-[1,2,4]triazol-3-yl)-ethylcarbamoyl]-piperidin-1-yl}-2-
oxo-ethylsulfanylmethyl)-phosphonic acid

{2-[2-(2-Naphthalen-2-yl-1-pyridin-2-yl-ethylcarbamoyl)-piperidin-1-yl]-2-oxo-
ethylsulfanylmethyl}-phosphonic acid

and salts, hydrates and solvates thereof as well as pro drugs thereof.

14. (Currently Amended) A pharmaceutical composition comprising a compound according to ~~any of claims 1 to 13~~ claim 1 and a pharmaceutically acceptable carrier, diluent or excipient.

15. (Original) The pharmaceutical composition according to claim 14 comprising a further pharmaceutically active compound.

16. (Currently Amended) The pharmaceutical composition according to claim 14 ~~or 15~~, wherein the compound is present as a pharmaceutically acceptable salt or a pharmaceutically active solvate.

17. (Currently Amended) The pharmaceutically active composition according to ~~any of claims 14 to 16~~ claim 14, wherein the pharmaceutically active compound is either alone or in combination with any of the ingredients of the composition present in a multitude of individualized dosages and/or administration forms.

18. (Currently Amended) Use of a compound according to ~~any of the preceding claims~~ claim 1 for the manufacture of a medicament.

19. (Currently Amended) Use of a compound for the manufacture of a medicament for the treatment of a disease, whereby the disease involves an abnormal cell proliferation, an undesired cell proliferation, an abnormal mitosis and/or an undesired mitosis,

whereby the compound is a compound according to ~~any of the preceding claims~~
claim 1.

20. (Original) The use according to claim 19, wherein the compound is acting on an enzymatic activity involved in the regulation of cell division and/or cell cycle or part thereof, preferably the part of the cell cycle is mitosis.

21. (Currently Amended) The use according to claim 19 ~~or 20~~, wherein the disease is selected from the group comprising neurodegenerative diseases, stroke, inflammatory diseases, immune based disorders, infectious diseases, heart diseases, cardiovascular diseases and cell proliferative diseases.

22. (Original) The use according to claim 21, wherein the neurodegenerative disease is selected from the group comprising Alzheimer's disease, Huntington's disease, Parkinson's disease, peripheral neuropathy, progressive supranuclear palsy, corticobasal degeneration, frontotemporal dementia, synucleinopathies, multiple system atrophy, amyotrophic lateral atrophy, prion diseases and motor neuron diseases.

23. (Original) The use according to claim 21, wherein the infectious disease is selected from the group comprising fungal, viral, bacterial and parasite infection.

24. (Original) The use according to claim 23, wherein the fungal infection is selected from the group comprising gynaecological and dermatological infection.

25. (Original) The use according to claim 23, wherein the fungal infection is caused by or involves *Histoplasma*, *Coccidioides*, *Cryptococcus*, *Blastomyces*, *Paracoccidioides*, *Aspergillus*, *Sporothrix*, *Rhizopus*, *Absidia*, *Mucor*, *Hormodendrum*, *Phialophora* Microsporum, Epidermophyton, *Rhinosporidium* or by a yeast, preferably *Candida* or *Cryptococcus*.

26. (Currently Amended) The use according to claim 21 ~~or 23~~, wherein the infectious disease is selected from or the fungal infection causes a disorder selected from the group comprising ringworm, candidiasis, coccidioidomycosis, blastomycosis, aspergillosis, cryptococcosis, histioplasmosis, paracoccidiomycosis, zygomycosis, sporotrichiosis, mycotic keratitis, nail hair and skin disease, lobomycosis, chromoblastomycosis, mycetoma.

27. (Original) The use according to claim 23, wherein the bacterial infection is selected from the group comprising infections caused by Gram-positive and by Gram-negative bacteria.

28. (Original) The use according to claim 27, wherein the bacterial infection is caused by or involves *Staphylococcus*, *Clostridium*, *Streptococcus*, *Listeria*, *Salmonella*, *Bacillus*, *Escherichia*, *Mycobacteria*, *Serratia*, *Enterobacter*, *Enterococcus*, *Nocardia*, *Hemophilus*, *Neisseria*, *Proteus*, *Yersinia*, *Helicobacter* or *Legionella*.

29. (Currently Amended) The use according to claim 21 ~~or 23~~, wherein the infectious disease is selected from or the bacterial infection causes a disorder selected from the group comprising pneumonia, diarrhea, dysentery, anthrax, rheumatic fever, toxic shock syndrome, mastoiditis, meningitis, gonorrhea, typhoid fever, brucellis, Lyme disease, gastroenteritis, tuberculosis, cholera, tetanus and bubonic plague.

30. (Original) The use according to claim 23, wherein the viral infection is selected from the group comprising infections caused by or involving retrovirus, HIV, Papilloma virus, Polio virus, Epstein-Barr, Herpes virus, Hepatitis virus, Papova virus, Influenza virus, Rabies, JC, encephalitis causing virus or hemorrhagic fever causing virus.

31. (Original) The use according to claim 23, wherein the parasite infection is selected from the group comprising infections caused by or involving *Trypanosoma*, *Leishmania*, *Trichinella*, *Echinococcus*, *Nematodes*, *Classes Cestoda Trematoda*,

Monogenea, Toxoplasma, Giardia, Balantidium, Paramecium, Plasmodium, or Entamoeba.

32. (Original) The use according to claim 21, wherein the cell proliferative disorder is selected from the group comprising neoplastic and non-neoplastic disorders.

33. (Original) The use according to claim 32, wherein the neoplastic cell proliferative disorder is selected from the group comprising solid tumor, lymphoma and leukemia.

34. (Original) The use according to claim 33, wherein the solid tumor is selected from the group comprising carcinoma, sarcoma, osteoma, fibrosarcoma, and chondrosarcoma.

35. (Original) The use according to claim 32, wherein the neoplastic cell proliferative disorder is selected from the group comprising breast cancer, prostate cancer, colon cancer, brain cancer, lung cancer, pancreatic cancer, gastric cancer, bladder cancer and kidney cancer.

36. (Original) The use according to claim 32, wherein the non-neoplastic cell proliferative disorder is a fibrotic disorder, preferably the fibrotic disorder is fibrosis.

37. (Original) The use according to claim 32, wherein the non-neoplastic cell proliferative disorder is selected from the group comprising prostatic hypertrophy, endometriosis, psoriasis, tissue repair and wound healing.

38. (Original) The use according to claim 21, wherein the immune based/inflammatory disease is an autoimmune disease or disorder.

39. (Original) The use according to claim 21, wherein the immune based/inflammatory disease is selected from the group comprising rheumatoid arthritis, glomerulonephritis, systemic lupus erythematosus associated glomerulonephritis, irritable bowel syndrome, bronchial asthma, multiple sclerosis, pemphigus, pemphigoid, scleroderma, myasthenia gravis, autoimmune haemolytic and thrombocytopenic states, Goodpasture's syndrome, pulmonary hemorrhage, vasculitis, Crohn's disease and dermatomyositis.

40. (Original) The use according to claim 21, wherein the immune based and/or inflammatory disease is an inflammatory condition.

41. (Original) The use according to claim 21, wherein the immune based and/or inflammatory disease is selected from the group comprising inflammation associated with burns, lung injury, myocardial infarction, coronary thrombosis, vascular occlusion, post-surgical vascular reocclusion, arteriosclerosis, traumatic central nervous system injury, ischemic heart disease and ischemia-reperfusion

injury, acute respiratory distress syndrome, systemic inflammatory response syndrome, multiple organ dysfunction syndrome, tissue graft rejection and hyperacute rejection of transplanted organs.

42. (Currently Amended) The use according to ~~any of claims 19 to 41~~ claim 19, wherein the medicament is for administration via an administration route which is selected from the group comprising oral, subcutaneous, intravenous, intranasal, transdermal, intraperitoneal, intramuscular, intrapulmonar, vaginal, rectal, and intraocular administration.

43. (Currently Amended) The use according to ~~any of claims 19 to 42~~ claim 19, wherein the medicament is for the administration to a mammal, preferably to a human being.

44. (Cancelled)